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AF/1762

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Franco Leonardi et al.

Serial No.: 10/064,583

Filed: July 29, 2002

For: METHOD OF MANUFACTURING ELECTROMAGNETIC  
DEVICES USING KINETIC SPRAY

Attorney Docket No.: FMC 1539 PUS2

Group Art Unit: 1762

Examiner: B. Pianalto

**APPLICANTS' REPLY BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
U.S. Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The Examiner incorrectly characterizes GB 1,444,858 (the '858 patent") in his  
Answer to Applicants' Appeal Brief by stating:

Claim1 is rejected under 35 U.S.C. 102(a) as anticipated by or,  
in the alternative, under 35 U.S.C. 103(a) as obvious over  
1,444,858. This reference discloses on page 1, lines 10-15 and  
lines 65-98 and page 3, lines 35-50 an article comprising a  
substrate having a **coating comprising permanent magnetic  
particles dispersed in a binder**. It is the examiner's opinion that  
applicant's article is anticipated by the article of the reference.

Examiner's Answer, p. 3

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8**

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on:

April 15, 2004  
Date of Deposit

James W. Proscia  
Name of Person Signing

James W. Proscia  
Signature

Neither passages in the '858 patent (or anywhere else in the '858 patent) disclose magnetic particles dispersed in a binder. Each of these sections of the '858 are reproduced below for the convenience of the Board:

This invention relates to a method apparatus for manufacturing a film-formed permanent magnet formed on a surface of paper, cloth, plastics material film or flexible base material.

'the 858 patent, p. 3, ll. 35-50

and

Also the magnetic orientated film 16 is firmly stuck to the base material 1, and finished into a smooth lustrous surface by means of the pressing rolls 15a and 15b. Therefore, the film-formed permanent magnet manufactured in accordance with this invention can not only possess high durability against for example bending and twisting, but also adheres well to the object to be attracted. It can stick fittingly even to a curved surface.

The film-formed permanent magnet produced in accordance with this invention permits direct printing or colouring on the rear surface of the base material 1, assuming of course that the base material is compatible with such printing or colouring.

'the 858 patent, p. 3, ll. 35-50

Review of both these passages clearly reveals that the '858 lacks any disclosure of the limitation of independent claim 1 which requires "microstructures of permanent magnet material embedded in the binder material."

It is doubtful that the method of the '858 patent can produce a structure with "microstructures of permanent magnet material embedded in the binder material." The '858 patent discloses:

. . . providing a paste containing a solvent and a mixture of a magnetizable material and a bonding agent, the said mixture

containing from 80 to 98 % by weight of a finely powdered hard magnetic substance as the magnetizable material; depositing a thin film-like coating of the paste on the surface of a thin sheet-like base material; sequentially passing the coating under a plurality of levelling knives arranged in series to level the coating to a uniform thickness and to provide the coating with a smooth surface; magnetizing the finely powdered hard magnetic substance in the levelled coating perpendicular to the surface of the base material; drying the magnetized coating; and roll pressing the dried coating on the base material.

‘the ‘858 patent p. 1, ll. 60-79

It is readily obvious that the paste used in the ‘858 patent contains a large amount of a finely powdered hard magnetic substance. Therefore, it is not possible that such a large amount of magnetic powder can be embedded in the much smaller amount of a “bonding agent” which must be less than 20%. (Actually, it must be appreciably less than 20% because the paste also contains a solvent.) Finally, the “bonding agent” of the ‘858 patent must be different in nature to the “binder” of the present invention. The bonding agent of the ‘858 patent must function by adhering the magnet powder together and not by embedding the powder in the bonding agent.

The Examiner further characterizes the ‘858 patent by stating in the Examiner’s

Answer:

The article of the reference would inherently contain microstructures of permanent magnet material and would inherently have a permanent magnetic moment. Also the process limitations in these article claims are immaterial from a patentable point of view.

Examiners’ Answer, p. 3

The Examiner’s inherency argument is inconsistent with case law regarding the appropriateness of using inherency in sustaining a rejection. The Court in *Ex parte Schricker* held:

However, when an examiner relies on inherency, it is incumbent on the examiner to point to the "page and line" of the prior art which justifies an inherency theory. Compare *In re Rijckaert*, 9 F.3d 1531, 1533, 28 USPQ 2d 1955, 1957 (Fed. Cir. 1993) (when the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the prior art) (citing *In re Yates*, 663 F.2d 1054, 1057, 211 USPQ 1149, 1151 (C.C.P.A. 1981)).

*Ex parte Schricker*, 56 USPQ 2d 1723, 1725 (B.P.A.I. 2000) (unpublished) (emphasis added)

As set forth above, the '858 patent does not disclose "microstructures of permanent magnet material embedded in the binder material." Moreover, the Examiner fails to specifically point out any justification for his assertion that the '858 patent would "inherently contain microstructures of permanent magnet material and would inherently have a permanent magnetic moment." As set forth in Applicants' Appeal Brief, the method disclosed in the '858 patent utilizes a paste of material which is deposited on a thin sheet-like substrate. The method of the '858 patent is described as a very different process than a kinetic spray process.

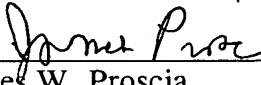
For the reasons set forth above and in Applicants' Appeal Brief, claim 1 cannot be rejected under § 102 since not every limitation of this claim is disclosed in the '858 patent. Similarly, the '858 patent standing alone can not be used to support an obviousness rejection under 35 U.S.C. § 103(a). The '858 is deficient in sustaining a rejection under either § 102 or § 103(b) because it does not disclose a film with "microstructures of permanent magnet material embedded in the binder material." Accordingly, claim 1 and its dependent claims 2-10 are allowable.

Applicants believe that no additional fees are required as a result of the filing of this paper. However, the Examiner is authorized to charge any additional fees or credits as a result of the filing of this paper to Ford Global Technologies, Inc.'s Deposit Account No. 06-1510 as authorized by the original transmittal letter in this case. If a telephone or video conference would help expedite allowance or resolve any additional questions, such a conference is invited at the Examiner's convenience.

Respectfully submitted,

**Franco Leonardi et al.**

By: \_\_\_\_\_

  
James W. Proscia

Registration No. 47,010

Attorney/Agent for Applicant

Date: 4-15-04

**BROOKS KUSHMAN P.C.**  
1000 Town Center, 22nd Floor  
Southfield, MI 48075-1238  
Phone: 248-358-4400  
Fax: 248-358-3351